Improvements to Hazardous Materials Audit Program Prove Effective

2009 Environment, Energy and Sustainability Symposium and Exhibition

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Outline
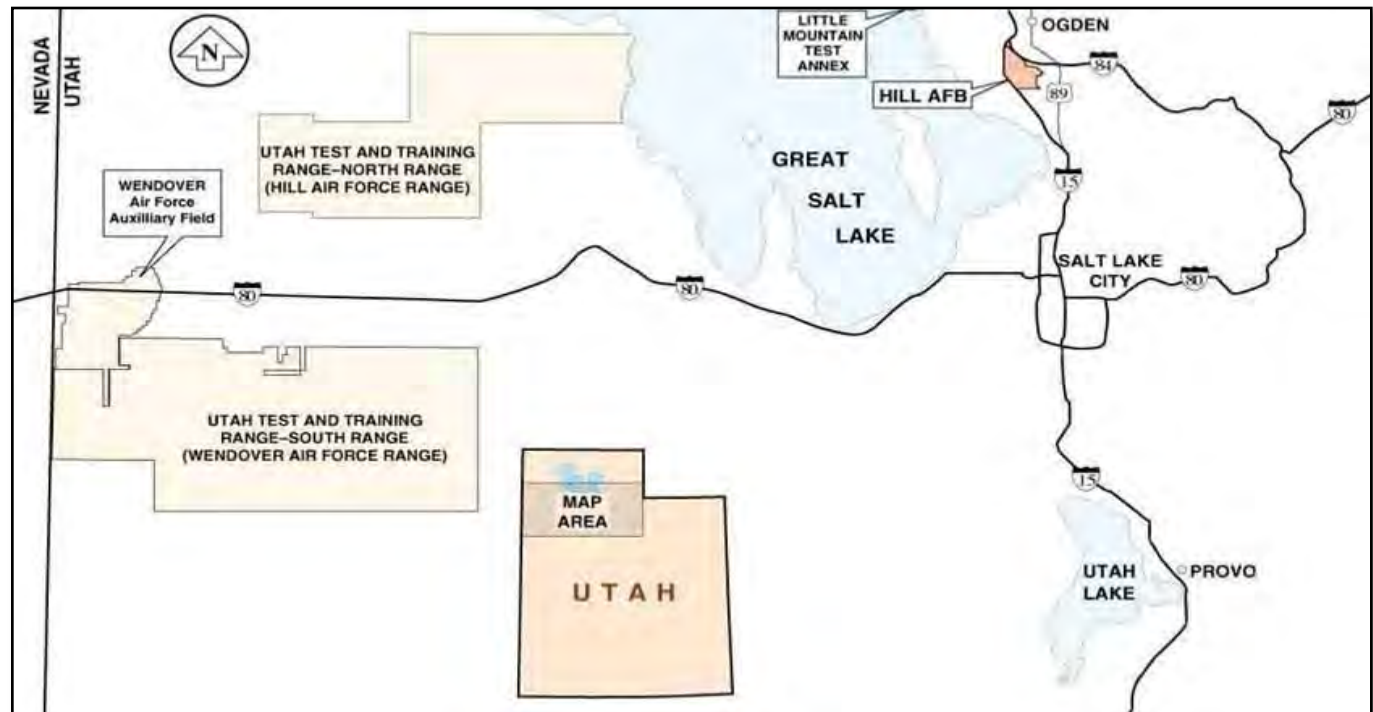
1. Hill AFB Background

2. HazMat Audit Program

3. Results

4. Lessons Learned

5. Summary

Hill AFB Background

> Maintenance depot

> F-16, A-10, F-22, C-130, B-2, and stealth aircraft

> 28,000+ employees

Hill AFB Background

> 52,000 industrial processes

> 74 HazMat distribution
  centers (Hazmarts)

Hill AFB Background

> More than 500,000 HazMat issues per year

> More than 7,000 different active HazMat

> More than 1,400 new HazMat each year

> More than 1,000 processes and shops of concern

EMAssist

Hill AFB Background

> Clean Air Act (CAA)

- HazMat constituent and vapor pressure limits

- HazMat consumption limits

- Tiered process controls based on HazMat and operation type

> Occupational Safety and Health Administration (OSHA)

- Hazard communication

> Resource Conservation and Recovery Act (RCRA)

- Knowledge-based waste characterization

Hill AFB Background

> The Enterprise Environmental, Safety and Occupational Health Management Information System (EESOH-MIS) Hazardous Materials Module

- Standardized Air Force HazMat tracking system

- 600,000 individual containers of HazMat issued annually

HazMat Audit Program

> Perform inventory reconciliation audits

> Reduce HazMat inventory transaction errors in EESOH-MIS HazMat Module

> Ensure a strong regulatory compliance posture

HazMat Audit Program

Physical Inventory   Electronic Inventory

Upload and Compare
Physical vs. Electronic Location

HazMat Audit Program

> Two changes to decrease error rates

- Implementation of a compliance risk-based audit frequency

- Communication of results to each Hazmart's chain of command

> Risk-based frequency

- Quarterly (26)

- Semi-annual (39)

- Annual (9)

HazMat Audit Program

> Errors are identified by audit tool

> Root causes are identified

> Corrective actions are then taken by HazMat personnel

Results

> Increased focus on management efforts for Hazmarts with greatest risk of non-compliance

> Increased visibility of day-to-day operations of each Hazmart

> Increased involvement from upper management

≡MAssist

Results

> Overall improvement of 31% in error rate

> Highest risk areas

- Improvement in 100% of Hazmarts

- Reduced initial error rate by 30%

- 50% decrease in average error rate

- 49% decrease in total number of container errors

Lessons Learned

> Changes provided immediate and considerable improvement in audit errors

> This approach will be implemented in a Shop-Level Materials Audit Program

Summary

> Hill AFB

  – 74 Hazmarts

  – 600,000 individual containers of HazMat issued annually

  – EESOH-MIS HazMat Module used to track data

  – Inventory error rates a problem

Summary

> HazMat Audit Program

– Implement risk based HazMat audit frequency

– Communicate results through chain of command

> Results

– Improved compliance standing

– Increased inventory accuracy

> Lessons learned

– Implement similar Shop-Level Audit Program

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